## Risk Factors

### 1.) Biosecurity

- **Introduced cattle and other livestock**
  - purchased or reintroduced cattle may have received treatments, of which you are unaware.
  - request complete treatment records on any animals purchased.
  - identify treated animals to assure proper meat and milk withholding.
  - test all animals for residues before shipping milk or culling recently purchased animals.

- **Cull animals**
  - cull and transported animals subjected to stress shed more pathogens and are subject to injury.
  - minimize stress on animals to be culled or transported.
  - have culling plan in place.
  - make individual cow decisions regarding euthanasia on farm and appropriate disposition of carcasses (i.e. composting).

- **Herd health plans**
  - certain diseases can have food safety implications or cause condemnation of carcasses.
  - have herd health plans in place for Salmonella, *E. coli*, and bovine leukosis virus.

### 2.) Manure Management

- **Introduction of pathogens into food chain**
  - manure contamination of hides can contaminate facilities, equipment or meat at slaughter.
  - keep cull animals clean; do not overcrowd.
  - use clean trucks or trailers to transport cattle to market or slaughter.

### 3.) Feed Management

- **Contamination with drugs, pesticides or other chemicals**
  - feeds can become contaminated with drugs or chemicals in the feedmill or on the farm.
  - label and store medicated feeds separate from other feed ingredients.
  - store pesticides, fertilizers and other chemicals away from feed ingredients.
  - do not use the same equipment to weigh, mix, move or handle feeds and other non-feed chemicals.

- **FDA Mammalian/Ruminant Feed Ban**
  - due to the spread of BSE (bovine spongiform encephalopathy) from feeding ruminant proteins, FDA has banned the use of mammalian protein for feeds.
  - examine all feed labels.
  - ensure that feed mill adheres to FDA regulations.

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Risk Information</th>
<th>Risk factors on this farm (level of implementation)</th>
<th>Farm Feasibility Y/N</th>
</tr>
</thead>
</table>
| **1.) Biosecurity** | - Purchased or reintroduced cattle may have received treatments, of which you are unaware.  
  - Request complete treatment records on any animals purchased.  
  - Identify treated animals to assure proper meat and milk withholding.  
  - Test all animals for residues before shipping milk or culling recently purchased animals.  
  - Cull and transported animals subjected to stress shed more pathogens and are subject to injury.  
  - Minimize stress on animals to be culled or transported.  
  - Have culling plan in place.  
  - Make individual cow decisions regarding euthanasia on farm and appropriate disposition of carcasses (i.e. composting).  
  - Certain diseases can have food safety implications or cause condemnation of carcasses.  
  - Have herd health plans in place for Salmonella, *E. coli*, and bovine leukosis virus. | | |
| **2.) Manure Management** | - Manure contamination of hides can contaminate facilities, equipment or meat at slaughter.  
  - Keep cull animals clean; do not overcrowd.  
  - Use clean trucks or trailers to transport cattle to market or slaughter. | | |
| **3.) Feed Management** | - Feeds can become contaminated with drugs or chemicals in the feedmill or on the farm.  
  - Label and store medicated feeds separate from other feed ingredients.  
  - Store pesticides, fertilizers and other chemicals away from feed ingredients.  
  - Do not use the same equipment to weigh, mix, move or handle feeds and other non-feed chemicals.  
  - Due to the spread of BSE (bovine spongiform encephalopathy) from feeding ruminant proteins, FDA has banned the use of mammalian protein for feeds.  
  - Examine all feed labels.  
  - Ensure that feed mill adheres to FDA regulations. | | |
| 5.) Facilities | • Carcass bruising or damage | • Bruising and injury reduces the value of cull cows  
  o Inspect cow areas and remove sharp objects, broken equipment, protruding nails, bolts, etc.  
  o Handle and transport animals with care  
  • Arthritic Joints  
  o A great deal of trim loss is associated with arthritic joints  
  o Inspect for and treat joint problems before they become a problem  
  o Examine facilities for design flaws, including length of tie stall and management of free stalls  
  o Use lameness scoring system to monitor feet and leg problems  
  • Slipping, Falling  
  o Slippery footing can induce injury  
  o Non-slip flooring |
|---|---|---|
| 6.) Quality Assurance | • Injection sites | • Injection site lesions reduce carcass value and consumer acceptance  
  o Administer subcutaneous and IM injections in front of the shoulders  
  o If reusable syringes are used consult with veterinarian for proper sterilization procedures  
  • Drug Residues (see Core RA)  
  • Body Condition | • Residues pose a human health threat  
  o Written SOPs and employee training on drug use  
  • Market cattle before they become too thin or too fat |